

Revision of *Pareuplectops* Jeannel and description of a new affiliated genus from Australia (Coleoptera: Staphylinidae: Pselaphinae)

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Revision of *Pareuplectops* Jeannel and description of a new affiliated genus from Australia (Coleoptera: Staphylinidae: Pselaphinae) - The genus *Pareuplectops* is revised to include 11 species, 8 of which are new: *P. botellus* sp. n., *P. faktor* sp. n., *P. isiciarius* sp. n., *P. lopchang* sp. n., *P. lucanicus* sp. n., *P. salami* sp. n., *P. sommoo* sp. n. and *P. tubarius* sp. n.. Two species are transferred from *Epiplectus* Raffray to *Pareuplectops*: *P. tenasserimi* (Blattný, 1925) **comb. n.** and *P. novissimus* (Blattný, 1925) **comb. n.**, these are also synonymized (i.e. *E. tenasserimi* = *E. novissimus* **syn. n.**). The lectotypes of *P. pubescens* (Raffray, 1890) and *P. coomani* Jeannel, 1957, are designated. In addition *Euparops* **gen. n.** is erected to accommodate *Pareuplectops styx* Chandler, 2001, which is thus recombined as *Euparops styx* **comb. n.**, together with three new species from Australia: *E. chandleri* sp. n., *E. dijeridu* sp. n. and *E. forix* sp. n.. All these taxa are illustrated and keyed.

Keywords: Coleoptera - Staphylinidae - Pselaphinae - Proterini - *Pareuplectops* - *Euparops* - taxonomy - Asia.

INTRODUCTION

This paper continues our study of Proterini *sensu stricto*, which started with the revision of the type genus of the tribe, *Proterus* Raffray, 1897 (Cuccodoro & Kurbatov, 2006). Here we revise the genus *Pareuplectops* Jeannel, 1957, and define a closely related new genus. These two genera possess the putative autapomorphies of the group, which are: 1) genal areas each with a marked and smooth depression allowing repose of the maxillary palpi, 2) posterior edge of female abdominal sternite 6 notched (Fig. 6) as in male, and 3) female abdominal sternite 7 modified in a genital plate covering genital opening (Fig. 7) similar to that in male.

Pareuplectops was erected by Jeannel (1957) to accommodate *Mechanicus pubescens* (Raffray, 1890) (Sumatra) and his new species *P. coomani* Jeannel, 1957 (Vietnam). Recently Chandler (2001) described a third *Pareuplectops* species from northeastern Australia, *P. styx*, and mentioned the occurrence in this region of two additional species he left undescribed.

In the course of our study of the types of Blatný housed in the National Museum, Prague, we found that the two species he described in *Epiplectus* Raffray, 1898 (i.e. *E. tenasserimi* Blatný, 1925, and *E. novissimus* Blatný, 1925) are synonyms and share little in common with the type species of the genus *E. cavifrons* (Raffray, 1894) (of which we have examined the type material); they belong indeed to *Pareuplectops*. We also discovered in material recently collected from the Oriental region eight additional species for this genus, which are described below.

The examination of *P. styx* Chandler and three other additional species from Australia led us to define for them a distinct, new genus (i.e. *Euparops*), which differs from *Pareuplectops* notably by the lack of pronotal median sulcus, the elytra being margined posteriorly with a row of small depressions, and the presence of a single mediobasal fovea on abdominal tergite 1.

MATERIAL AND METHODS

This study is based exclusively on adults (56 specimens). The label data of the type material are reproduced literally between " ", with additional information pertaining to labels, or locality between [], and with | as the separator between each individual label. For new types and additional material label data are given in standard format, with major administrative units in English, name of collectors between (), and additional information from unpublished fieldtrip reports between [].

Abbreviations of collections used in the present study are:

ANIC Australian National Collection of Insects
MHNG Muséum d'histoire naturelle, Geneva, Switzerland
MNHN Muséum National d'Histoire Naturelle, Paris, France
NHMP National Museum, Prague, Czech Republic
PCDC Private collection of D. S. Chandler, Durham, USA
PCSK Private collection of S. A. Kurbatov, Moscow, Russia

Measurements are defined as follows: body length is measured from anterior outline of head (i.e. apical margin of labrum) to apex of abdomen; head width (HW) = distance between outer outline of head just behind eyes; maximal head width (HWmax) = distance between outer outline of eyes; head length (HL) = distance between tip of frons and middle of occipital margin; pronotal length (PL) = medial distance between anterior and posterior margins of pronotum; pronotal width (PW) = maximal distance between lateral pronotal outlines; elytral length (EL) = elytral sutural length; elytral width (EW) = maximal width of the elytra taken together.

Members of *Pareuplectops* and *Euparops* have the body pubescence fairly homogenous and the setal length is given as measured on the elytral disc. The abdominal tergites and sternites are numbered according to Chandler (2001) in arabic (visible position) and roman (morphological position). The abdominal segments are counted from tergite 1 (IV) and sternite 1 (III). The aedeagi and other body parts illustrated in the present study were mounted in Canada balsam on acetate slides, and drawn using a drawing tube mounted on a compound microscope.

TAXONOMY

Key to species of *Pareuplectops* and *Euparops*

1 Pronotum without median sulcus. Posterior margin of elytra with a row of 5-6 well-marked smooth depressions (Fig. 30) *(Euparops* gen. n.) 2

- Pronotum with median sulcus (Fig. 1). Posterior margin of elytra without a row of depressions *(Pareuplectops* Jeannel) 5

2 Eyes very big, with temples in lateral view about as long as one facet of eye. Pronotum with punctuation dense and coarse. Male protibia simple *E. forix* sp. n.

- Eyes big, with temples in lateral view two or three times shorter than eyes. Pronotum impunctate, or finely punctate. Male protibia with a mesal apical tooth (Fig. 32) 3

3 Male with protrochanter bearing a spine or a denticle (similar to that in Fig. 32), and mesotibia bearing a distinct mesal apical tooth 4

- Male with protrochanter simple, and mesotibia bearing a minute mesal apical tooth *E. chandleri* sp. n.

4 Body about 1.15 mm long. Elytra 1.15-1.25 times as long as pronotum *E. dijeridu* sp. n.

- Body 1.30-1.45 mm long. Elytra 1.40-1.50 times as long as pronotum (Fig. 30) *E. styx* (Chandler)

5 Metasternum and sternites coarsely punctate *P. botellus* sp. n.

- Metasternum impunctate (Fig. 4) and sternites occasionally finely punctate 6

6 Body about 0.90 mm long. Elytra with discal sulcus extending to nearly three quarters of elytral length *P. lucanicus* sp. n.

- Body more than 1.10 mm long. Elytra with discal sulcus extending to not more than half of elytral length (Fig. 1) 7

7 Head with lateral and posterior edges well-marked, much darker than frons and vertex, abruptly inclined 8

- Head with lateral and posterior edges not well-marked, concolorous with frons and vertex, gradually inclined 13

8 Pronotum impunctate. Elytra about 1.5 times as wide as pronotum *P. pubescens* (Raffray)

- Pronotum punctate. Elytra at most 1.2 times as wide as pronotum 9

9 Male protrochanter simple 10

- Male protrochanter bearing a minute denticle 11

10 Aedeagus rather small (0.14 mm long) with bigger paramere not enlarged apically in lateral view (Fig. 27) *P. tenasserimi* (Blattný)

- Aedeagus rather big (0.21 mm long) with bigger paramere enlarged apically in lateral view (Fig. 29) *P. tubarius* sp. n.

11 Body 1.35-1.55 mm long (Fig. 1). Pubescence particularly short (elytral setae about 0.01 mm long). Aedeagus with bigger paramere located morphologically on the left (thus on the right on Fig. 10) .. *P. coomani* Jeannel

- Body 1.25-1.30 mm long. Pubescence short (elytral setae about 0.03 mm long). Aedeagus with bigger paramere located morphologically on the right (thus on the left on Figs 12, 24) 12

12 Aedeagus with apex of both parameres reaching the same level (Figs 12-13) *P. fartner* sp. n.

- Aedeagus with apex of both parameres not reaching the same level (Figs 24-25) *P. sommoo* sp. n.

13 Head impunctate and pronotum very finely punctate. Male protrochanter simple *P. lopchang* sp. n.

- Head and pronotum densely punctate. Male protrochanter bearing a stout spine 14

14 Body 1.30-1.35 mm long. Male protibia bearing a small mesal apical denticle *P. isiciarius* sp. n.

- Body 1.15-1.20 mm long. Male protibia simple *P. salami* sp. n.

***Pareuplectops* Jeannel, 1957**

Pareuplectops Jeannel, 1957: 7; type species: *Phthartomicrus pubescens* Raffray (by original designation).

DESCRIPTION: Body (Fig. 1) 0.90-1.55 mm long, elongate and strongly convex, fairly subcylindrical; more or less shiny due to punctuation generally shallow, or evanescent. Colouration fairly uniform, from pale brown to dark brown. Pubescence short, recumbent, that on medioapical portion of elytra not converging posteriorly. Head in dorsal view trapeziform or triangular, with anterior edge rounded. Upper part of head flat, except median area distinctly depressed, that vertexal depression extending posteriorly to big tentorial foveae. Lateral edges of frons with narrow and deep postantennal notches, the latter reaching anterior angles of vertexal depression to form an additional pair of foveae (these notches are cuticular invaginations of the lateral frontal edges). Posterior edge of head with small triangular occipital depression. Antennal tubercles indistinct. Eyes well-developed, prominent in both sexes. Temples obsolete. Article 4 of maxillary palpi (Fig. 2) with group of sensillae ('trichomes' sensu Nomura, 1991) on outer side. Genal areas each with a marked and smooth depression allowing repose of the maxillary palpi. Antenna consisting of 11 articles, distinctly divided into big scapus and pedicel, small and close articles of funicule, and more (male) or less (female) conspicuous club composed of 3 articles; scape notched apically, revealing basal stalk of article 2. Pronotum (Fig. 1) with median antebasal fovea and pair of lateral antebasal foveae; median antebasal fovea joined to lateral antebasal foveae by occasionally interrupted transverse sulci; median antebasal fovea prolonged anteriorly by median sulcus that does not reach anterior pronotal margin; lateral antebasal foveae prolonged anteriorly by lateral sulci up to ventral area below anterior pronotal margin; lateral pronotal outline near lateral fovea with distinct tooth; basal edge with row of four shallow depressions. Prosternum (Fig. 3) with pairs of lateral procoxal and anteroprosternal foveae; paranotal carinae present; median carina present, distinctly angular in lateral view. Elytra (Fig. 1) with 4 basal foveae grouped by pairs in two basal depressions; subhumeral fovea prolonged with marginal carina extending along entire elytral length; posterior margin without row of small depressions. Mesosternum (Fig. 4) with pair of lateral foveae; median carina absent. Mesocoxal cavities separated. Metasternum with pairs of lateral and lateral mesocoxal foveae; pair of longitudinal carinae present, extending from posterior edge of meso-

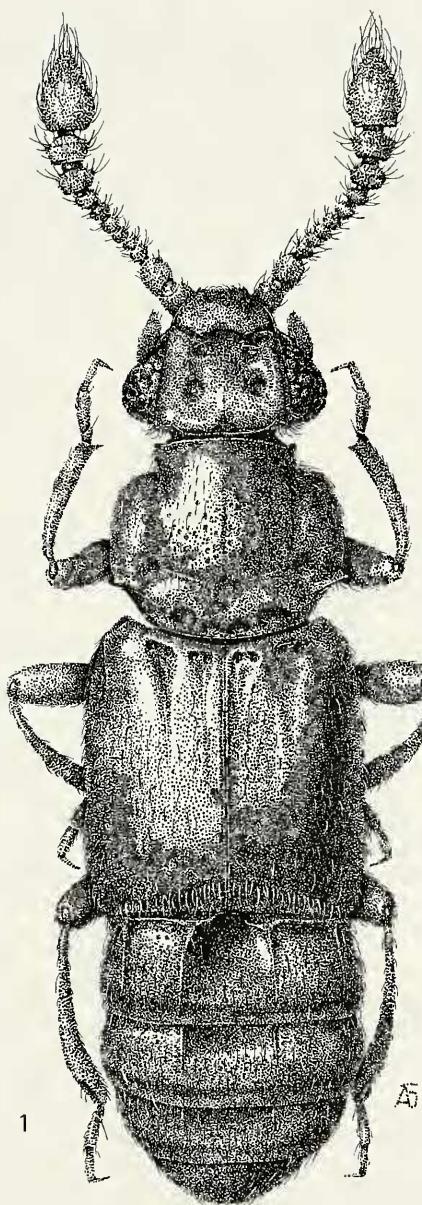
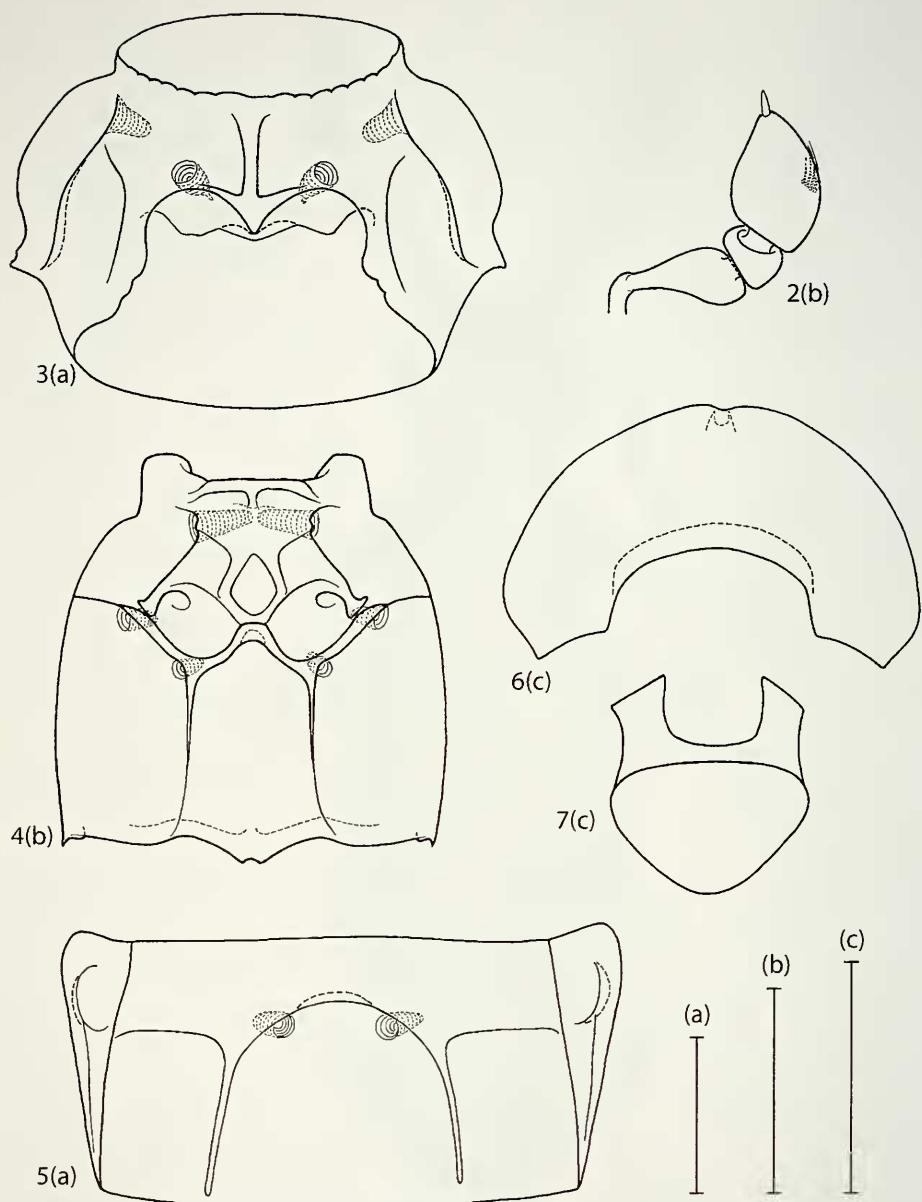


FIG. 1
Habitus of *Pareuplectops coomani* Jeannel.

coxal cavities to posterior metasternal margin. First three visible abdominal tergites fused to corresponding sternites; paratergal-tergal suture distinct only on tergite 1 (Fig. 5), less distinct and slightly shortened on tergites 2-3; junction between tergites 1-3 (IV-VI) and sternites 2-4 (IV-VI) carinate; tergite 1 about as long as tergites 2 or 3,



FIGS 2-7

Pareuplectops lopchang n. sp. (2, 4, 6-7) *P. salami* n. sp. (3, 5). Dorsal view of right maxillary palpus (2). Prosternum (3). Mesosternum and metasternum (4). Female abdominal sternites 6 (6) and 7 (7). Abdominal tergite 1 with paratergites (5). Scale bars = 0.1 mm.

with pair of long longitudinal basal carinae separated by distinct basal median depression supporting laterally a pair of mediobasal foveae; tergites 2-3 each with pair of basal longitudinal carinae; sternite 2 with pair of basolateral foveae; posterior edge of abdominal sternite 6 notched; sternite 7 modified as genital plate covering genital opening (its structure slightly different between male and female).

Male secondary sexual characters affecting the size of the antennal article 9 (i.e. its size fairly intermediate between that of articles 8 and 10 in female, and about as big as article 10 and much bigger than article 8 in male), and occasionally also protorchanter (toothed) and protibiae (toothed). Aedeagus with rather membranous median lobe and two asymmetrical parameres; asymmetry of the parameres occasionally inverted with respect to the axis of symmetry of the median lobe (i.e. occurrence of 'left' and 'right' forms).

DISTRIBUTION AND NATURAL HISTORY: *Pareuplectops* are quite poorly represented in collections. The examined specimens (42) were mainly collected in rain forests from samples of sifted leaf litter, or at light, at elevations ranging from sea level up to 1500m. The 11 species of *Pareuplectops* are from the Oriental region, where they occur in North-East India (1 species), Myanmar (1 species), Thailand (4 species), Laos (1 species), Hong Kong (3 species), Vietnam (3 species) and Sumatra (2 species). They have apparently very limited geographic distributions, with the notable exceptions of *P. coomani* (from Thailand and Vietnam) and *P. tenasserimi* (from Myanmar, Sumatra, Thailand, and Vietnam).

COMMENTS: *Pareuplectops* possesses the structure of the genal areas and the shape of the female abdominal sternites 6 and 7 (Figs 6-7) of *Proterini sensu stricto* (Cuccodoro & Kurbatov, 2006). It differs from *Proterus* and *Exoterus* Cuccodoro & Kurbatov, 2006, mainly by the metasternum possessing a pair longitudinal carinae (Fig. 4), the presence on the pronotum of a sulcus joining the three antebasal foveae (Fig. 1), and the presence of paranotal carinae.

Pareuplectops botellus sp. n.

Figs 8-9

Holotype (male, in MHNG): INDIA, Meghalaya, Khasi Hills, [between] Mawsynram-Balat, [16 km from Mawsynram] 1000 m, 27.x.1978 (C. Besuchet & I. Löbl) #30b [sifting in forest in ravine].

Paratypes (3, in MHNG): same data as holotype, 2 males & 1 female.

DESCRIPTION: Body 1.35-1.45 mm long, dark brown or yellowish brown, with pubescence about 0.03 mm long. Head with lateral and posterior edges not well-marked, not darkened, gradually inclined; posterior edge conspicuously raised, blunt, not distinctly sinuate near lateral angles, the latter not well-marked, rounded; lateral edges straight on their posterior portion; entire upper part of head (except smooth vertexal depression) densely covered with large punctation (interval between punctures much smaller than their diameter). Interval between tentorial foveae about 2 times larger than that between each fovea and corresponding lateral edge of head. Pronotal disc entirely covered with punctation similar to that on frons, but bigger, in middle with about 8-9 punctures between median sulcus and each lateral sulcus. Elytra, metasternum and abdomen (tergites and sternites) with punctation as that on pronotum.

Elytra with discal sulcus extending to distinctly less than half of elytral length. Abdominal tergite 1 with basal carinae straight, diverging posteriorly; maximal interval between carinae nearly one third of the width of segment 1.

MEASUREMENTS: HL = 0.19-0.21 mm; HW = 0.23 mm; HWmax = 0.31-0.32 mm; PL = 0.28-0.30 mm; PW = 0.40-0.41 mm; EL = 0.42-0.44 mm; EW = 0.51-0.52 mm.

Male. Protochanter with tooth. Protibia simple. Aedeagus (Figs 8-9) 0.21 mm long.

DISTRIBUTION: India: Meghalaya.

COMMENTS: *Pareuplectops botellus* is the only species of the genus with the pronotum, elytra, metasternum and abdomen conspicuously punctate.

***Pareuplectops coomani* Jeannel, 1957**

Figs 1, 10-11

Pareuplectops coomani Jeannel, 1957: 7-8.

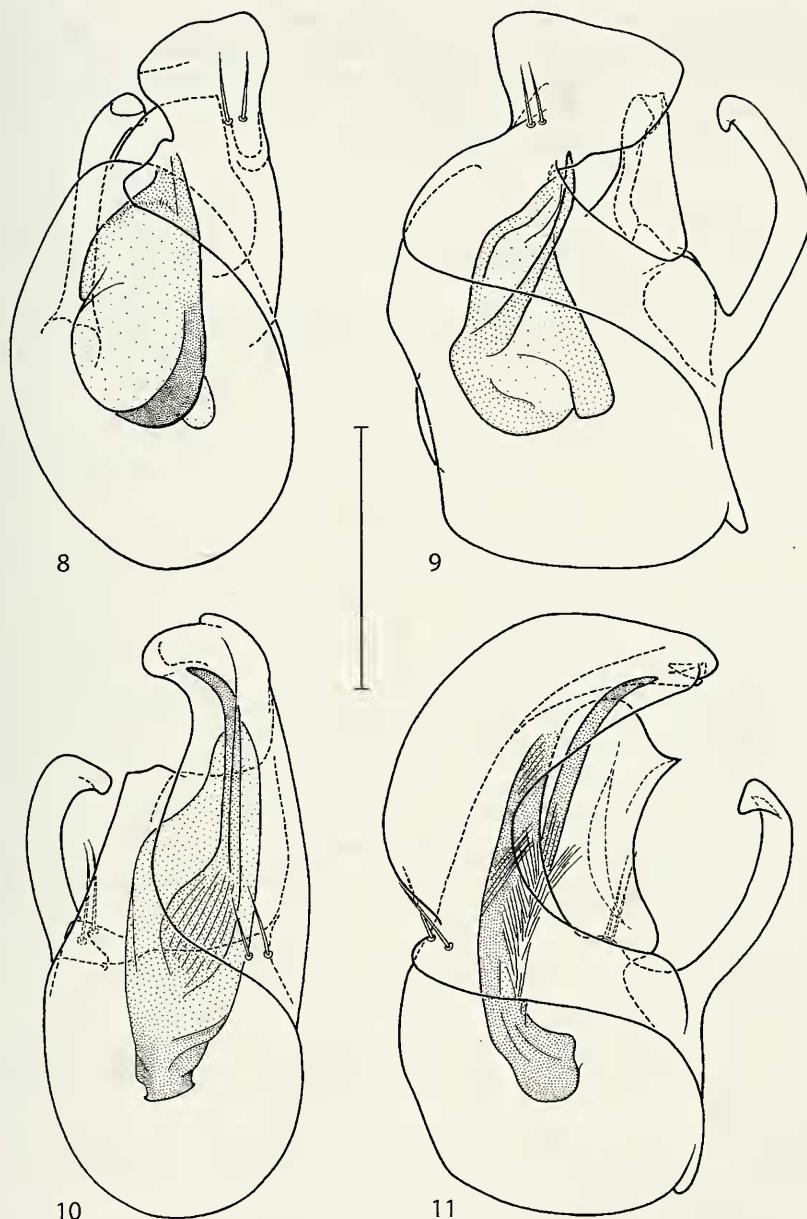
Lectotype (by present designation, male, in MNHN): "Museum Paris, Tonkin / Reg. de Hoa Binh / A. de Cooman, 1929 | type [red label] | *Pareuplectops coomani* n."

Paralectotypes (3 males, in MNHN): "Museum Paris / Tonkin / Reg. de Hoa Binh / A. de Cooman, 1929".

ADDITIONAL MATERIAL EXAMINED (5, in MHNG & PCSK): THAILAND, Chiang Mai Prov., ca. 10 km W Fang, Doi Angkhang, 1460 m, 21.v.1986 (P. Schwendinger) 1 female; Chiang Mai Prov., 33 km NE Chiang Mai [road Chiang Mai – Chiang Rai] 500 m, 3.xi.1985 (D. Burckhardt & I. Löbl) [sifting at base of big isolated tree] 1 male; Nakhon Ratchasima Prov., NE Bangkok, Khao Yai Nat. Park, near 'Headquarters', 750-850 m, 26.xi-3.xii.1985 (D. Burckhardt & I. Löbl) #28b [sifting of plant debris] 1 male; same data, but 800-900m, 1.xii.1985, #30a [sifting of plant debris at forest's edge, near swamp and little creek, 800m] 1 female; VIETNAM, Lao Cai Prov., near Sa Pa village, Hoang Lien Son Nat. Res., 1250 m, 27.vi-2.vii.1998 (A. Napolov) UV-light, 1 male.

DESCRIPTION: Body (Fig. 1) 1.35-1.55 mm long, reddish brown, with pubescence at most 0.01 mm long. Head with lateral and posterior edges well-marked, blackish, abruptly inclined; posterior edge very slightly sinuate near lateral angles, the latter well-marked, angulate; lateral edges straight; upper part of head (except smooth vertexal depression) sparsely covered with very fine punctation (interval between punctures generally much larger than their diameter). Interval between tentorial foveae nearly 2 times larger than that between each fovea and corresponding lateral edge of head. Pronotal disc (except area posterior to antebasal sulcus impunctate) densely covered with moderate punctation (interval between punctures smaller than their diameter); middle of pronotum with about 8-9 punctures between median sulcus and each lateral sulcus; punctation sparser and finer near anterior and lateral edges. Elytra with punctation similar to that on head; discal sulcus extending to half of elytral length. Metasternum impunctate. Abdomen with punctation on tergites intermediate between those on pronotum and elytra; tergite 1 with basal carinae straight, slightly diverging near posterior margin; maximal interval between carinae less than one third of the width of segment 1; sternites impunctate.

MEASUREMENTS: HL = 0.20-0.21 mm; HW = 0.20-0.23 mm; HWmax = 0.32-0.33 mm; PL = 0.28-0.29 mm; PW = 0.34-0.39 mm; EL = 0.40-0.45 mm; EW = 0.37-0.42 mm.



FIGS 8-11

Pareuplectops botellus n. sp. (8-9) and *P. coomani* Jeannel (10-11); aedeagus in dorsal (8, 10) and lateral (9, 11) views. Scale bar = 0.1 mm.

Male. Protochanter with small denticle. Protibia with small mesoapical tooth. Aedeagus (Figs 10-11) 0.20-0.23 mm long.

DISTRIBUTION: Thailand and Vietnam.

COMMENTS: An additional paralectotype labeled "Museum Paris / Tonkin / Reg. de Hoa Binh / A. de Cooman, 1929" is not conspecific and belongs in the Euplectini.

Pareuplectops coomani uniquely shares with *P. tenasserimi* very short elytral pubescence, from which it differs notably by its much larger interval between the tentorial foveae. See also comments under *P. fartner*.

***Pareuplectops fartner* sp. n.**

Figs 12-13

Holotype (male, in PCSK): VIETNAM, North Dong Nai Prov., Nam Cat Tien Nat. Res., 30.xi.2004 (D. Fedorenko) at light.

Paratypes (9, in MHNG & PCSK): same data as holotype, 2 female; same data, but 17.xi.2004, 1 female; same data, but 1.xii.2004, 1 male & 1 female; same data, but 24.xi.2004, 1 male & 1 female; same data, but 21.v.2005, 1 female; same data, but 30.v.2005, 1 female; same data, but 27.xi-4.xii.2004, intercept trap, 1 female.

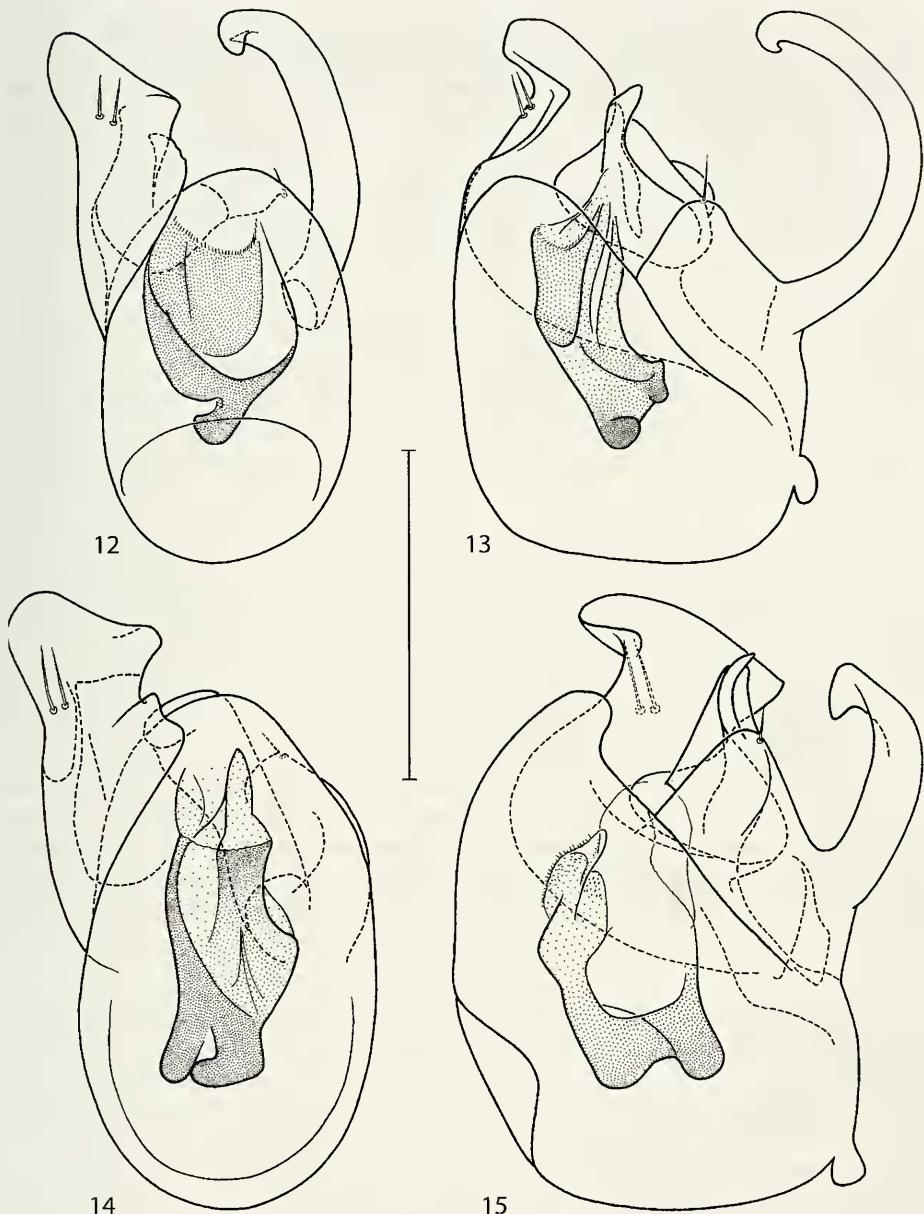
DESCRIPTION: Body 1.25-1.30 mm long, brown, with pubescence about 0.03 mm long. Head with lateral and posterior edges well-marked, blackish, abruptly inclined, except anterior portion of lateral edges gradually inclined; posterior edge near lateral angles slightly sinuate (female), or not (male); lateral angles rather well-marked, blunt; lateral edges straight on their posterior portion; presence of some minute punctures scattered on occiput, posterior part of frons and lateral sides of head. Interval between tentorial foveae slightly less than 2 times smaller than that between each fovea and corresponding lateral edge of head. Pronotal disc (except area posterior to antebasal sulcus impunctate) densely covered with fine punctuation (interval between punctures mainly slightly smaller than their diameter), the latter slightly finer near anterior edge and on area posteriorly transversal sulcus; in middle of pronotum with about 9 punctures between median sulcus and each lateral sulcus; punctuation sparser and finer near anterior and lateral edges. Elytra with punctuation rather dense consisting of punctures slightly finer than those on pronotal disc; discal sulcus extending to slightly less than half of elytral length. Metasternum impunctate. Abdomen with tergal punctuation similar to that on elytra, consisting of punctures slightly bigger on tergites 3-4 than on tergites 1-2; tergite 1 with basal carinae fairly straight, diverging near posterior margin; maximal interval between carinae about one third of the width of segment 1; sternites occasionally punctate.

MEASUREMENTS: HL = 0.19-0.21 mm; HW = 0.18-0.19 mm; HWmax = 0.30-0.32 mm; PL = 0.27-0.30 mm; PW = 0.33-0.36 mm; EL = 0.43-0.44 mm; EW = 0.39-0.43 mm.

Male. Protrochanter with small denticle. Protibia with mesoapical tooth. Aedeagus (Figs 12-13) 0.15-0.16 mm long.

DISTRIBUTION: Vietnam.

COMMENTS: Six species (*P. coomani*, *P. fartner*, *P. pubescens*, *P. sommoo*, *P. tenasserimi* and *P. tubarius*) have the posterior edges of head well-marked and blackish. Three of them (*P. coomani*, *P. fartner* and *P. sommoo*) also possess a small mesal denticle on the male protibia. *Pareuplectops fartner* and *P. sommoo* differ from *P. coomani* by their longer elytral pubescence, and are distinguished by aedeagal characters.



FIGS 12-15

Pareuplectops fartneri n. sp. (12-13) and *P. isiciarius* n. sp. (14-15); aedeagus in dorsal (12, 14) and lateral (13, 15) views. Scale bar = 0.1 mm.

***Pareuplectops isiciarius* sp. n.**

Holotype (male, in MHNG): [CHINA] Hong Kong, New Territories, ix-x.1996 (G. de Rougemont).

Paratypes (4, in MHNG): same data as holotype, 2 males & 2 females.

Figs 14-15

DESCRIPTION: Body 1.30-1.35 mm long, brown, with occasionally paler elytra, with pubescence about 0.03 mm long. Head with lateral and posterior edges not well-marked, not darkened, gradually inclined; posterior edge fairly straight near lateral angles, the latter not well-marked, rounded; lateral edges fairly straight; upper part of head (except smooth vertexal depression) densely covered laterally and posteriorly with coarse punctation (interval between punctures smaller than their diameter); posterior half of frons just in front of vertexal depression covered with finer punctation; anterior half of frons impunctate. Interval between tentorial foveae slightly larger than that between each fovea and corresponding lateral edge of head. Entire pronotum (except area posterior to antebasal sulcus impunctate) densely covered with large punctation (interval between punctures much smaller than their diameter); in middle of pronotum with about 6-7 punctures between median sulcus and each lateral sulcus. Elytral punctation similar to that on head; discal sulcus extending to half of elytral length. Metasternum impunctate. Abdomen with tergites and sternites impunctate; tergite 1 with basal carinae straight, or somewhat arcuate, slightly diverging near posterior margin; maximal interval between carinae nearly one third of the width of segment 1.

MEASUREMENTS: HL = 0.18-0.19 mm; HW = 0.19-0.20 mm; HWmax = 0.30-0.33 mm; PL = 0.28-0.29 mm; PW = 0.39 mm; EL = 0.42-0.46 mm; EW = 0.49-0.52 mm.

Male. Protrrochanter with stout, curved spine. Protibia with small mesoapical tooth. Aedeagus (Figs 14-15) 0.20 mm long.

DISTRIBUTION: China: Hong Kong.

COMMENTS: The species is very similar to *P. salami*, from which it differs mainly by its more robust pronotum with anterior area as punctate as the disc, elytra and abdominal tergites finely, but distinctly punctate, and by the presence in the male of apically toothed protibiae. With respect to *P. salami*, *P. isiciarius* has also a distinctly bigger aedeagus with the small paramere wider. See comments under *P. lopchang* and *P. salami*.

Pareuplectops lopchang sp. n.

Figs 2, 4, 6-7, 16-17

Holotype (male, in MHNG): [CHINA] Hong Kong, New Territories, v.1996 (G. de Rougemont).

Paratypes (2, in MHNG): same data as holotype, but ix-x.1996, 1 female (disarticulated); Hong Kong, iii.1996 (G. de Rougemont), 1 male.

DESCRIPTION: Body 1.35-1.40 mm long, yellowish brown, with pubescence about 0.02 mm long. Head with lateral and posterior edges not well-marked, not darkened, gradually inclined; posterior edge not sinuate near lateral angles, the latter not well-marked, rounded; lateral edges converging, slightly arcuate to antennal notches angulate; upper part of head impunctate; interval between tentorial foveae slightly larger than that between each fovea and corresponding lateral edge of head. Pronotum (except area posterior to antebasal sulcus impunctate) sparsely covered with very fine punctation (interval between punctures smaller than their diameter), the latter evanescent on area posteriorly transversal sulcus; in middle of pronotum with about

7-8 punctures between median sulcus and each lateral sulcus. Elytra impunctate; discal sulcus extending to half of elytral length. Metasternum impunctate (Fig. 4). Abdomen with tergites and sternites impunctate; tergite 1 with basal carinae slightly arcuate, diverging on their anterior portion; maximal interval between carinae exceeding one third of the width of segment 1.

MEASUREMENTS: HL = 0.20 mm; HW = 0.22 mm; HWmax = 0.31-0.32 mm; PL = 0.26-0.27 mm; PW = 0.34 mm; EL = 0.40-0.41 mm; EW = 0.44-0.45 mm.

Male. Protrochanter and protibia simple. Aedeagus (Figs 16-17) 0.17-0.18 mm long.

DISTRIBUTION: China: Hong Kong.

COMMENTS: *Pareuplectops botellus*, *P. isiciarius*, *P. lopchang*, *P. lucanicus* and *P. salami* have in common the posterior edges of the head gradually inclined. Among them, *P. lopchang* uniquely shares with *P. lucanicus* the impunctate upper part of the head, but it is a much bigger species.

Pareuplectops lucanicus sp. n.

Figs 18-19

Holotype (male, in MHNG): THAILAND, Nakhon Ratchasima Prov., NE Bangkok, Khao Yai Nat. Park, Khao Khieo [below 'Air Force Check Point'] 1150 m, 28.xi.1985 (D. Burckhardt & I. Löbl) #29 [sifting of plant debris in rather dry forest on slope N].

DESCRIPTION: Body 0.90 mm long, yellowish brown, with pubescence about 0.02 mm long. Head with posterior and lateral edges mostly blackish, posterior edge rather abruptly inclined, lateral edges gradually inclined; posterior edge near lateral angles not sinuate, the latter not well-marked, rounded; lateral edges straight on their posterior portion; upper part of head impunctate. Interval between tentorial foveae about as large as that between each fovea and corresponding lateral edge of head. Pronotum, elytra, metasternum and abdomen (tergites and sternites) impunctate. Elytra with discal sulcus extending to nearly three quarters of elytral length. Abdominal tergite 1 with basal carinae straight, parallel; maximal interval between carinae exceeding one third of the width of segment 1.

MEASUREMENTS: HL = 0.17 mm; HW = 0.15 mm; HWmax = 0.24 mm; PL = 0.21 mm; PW = 0.28 mm; EL = 0.32 mm; EW = 0.37 mm.

Male. Protrochanter simple. Protibia with small mesoapical denticle. Aedeagus (Figs 18-19) 0.12 mm long.

DISTRIBUTION: Thailand.

COMMENTS: *Pareuplectops lucanicus* is the only species of the genus that is less than 1 mm in length.

Pareuplectops pubescens (Raffray, 1890)

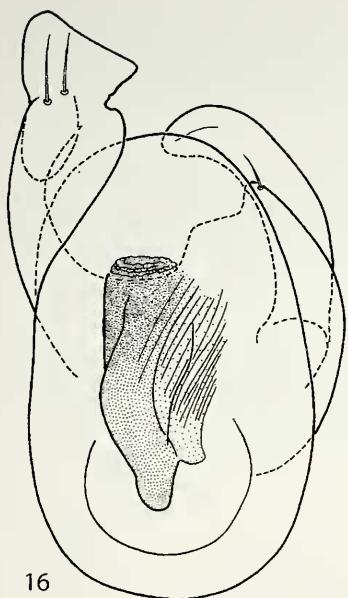
Figs 20-21

Phthartomicus pubescens Raffray, 1890: 194.

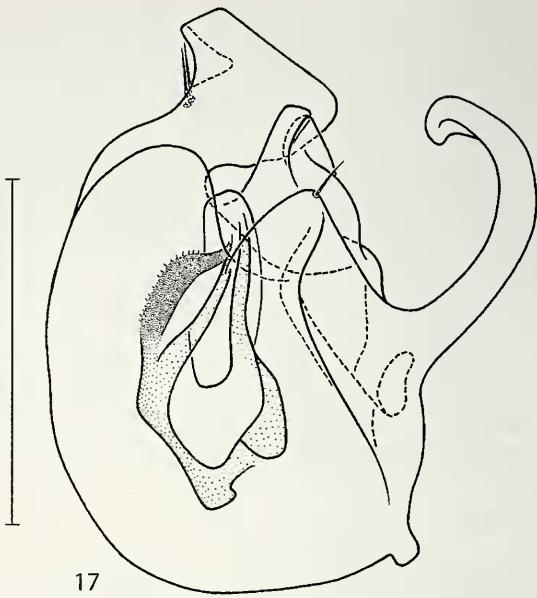
Mechanicus pubescens, Raffray, 1893: 467-468.

Pareuplectops pubescens, Jeannel, 1957: 7.

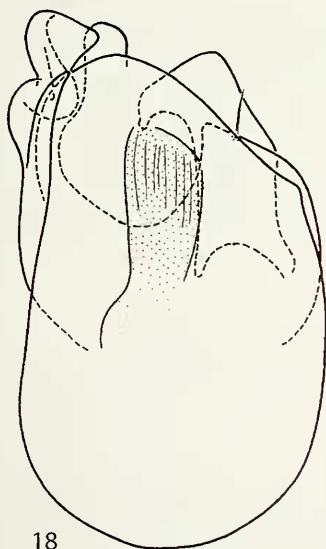
TYPE MATERIAL (lectotype male, by present designation, in MNHN): "Sumatra [handwritten on white rectangular label] Palembang | Muséum Paris, 1917 / col. A. Raffray [type-written on white rectangular label] | Type [typewritten on red rectangular label] | *M. pubescens*



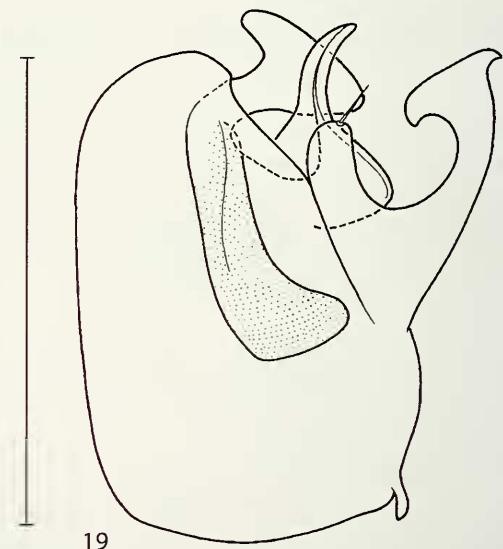
16



17



18



19

FIGS 16-19

Pareuplectops lopchang n. sp. (16-17) and *P. lucanicus* n. sp. (18-19); aedeagus in dorsal (16, 18) and lateral (17, 19) views. Scale bars = 0.1 mm.

[handwritten] / A. Raffray det. [typewritten on white rectangular label] | Lectotype / *Phthartomicrus pubescens* Raffray / det. Cuccodoro & / Kurbatov 2007 [typewritten on red rectangular label] | *Pareuplectops pubescens* (Raffray) / det. Cuccodoro & / Kurbatov 2007' [typewritten on white rectangular label]".

DESCRIPTION: Body 1.20 mm long, reddish brown, with pubescence about 0.03 mm long. Head with posterior and lateral edges abruptly inclined, mostly blackish; posterior edge near lateral angles not sinuate, the latter well-marked, angulate; lateral edges straight; upper part of head impunctate. Interval between tentorial foveae about as large as that between each fovea and corresponding lateral edge of head. Pronotum, elytra, metasternum and abdomen (tergites and sternites) impunctate. Elytra with discal sulcus extending to half of elytral length. Abdominal tergite 1 with basal carinae straight, diverging posteriorly; maximal interval between carinae less than one third of the width of segment 1.

MEASUREMENTS: HL = 0.16 mm; HW = 0.17 mm; HWmax = 0.25 mm; PL = 0.22 mm; PW = 0.30 mm; EL = 0.33 mm; EW = 0.47 mm.

Male. Protrochanter with stout spine. Protibia with stout mesoapical tooth. Aedeagus (Figs 20-21) 0.17 mm long.

DISTRIBUTION: Sumatra.

COMMENTS: Raffray (1890) described this species in *Phthartomicrus* based explicitly on two putative females (he could not sex them unambiguously), one (from Singapore) he collected sweeping vegetation in the evening, and the second (from Sumatra) in Schaufuss's collection bearing a label "*Euplectus cordicollis* Schfs in litt.". In 1893, he acknowledged reception of 'several specimens sent to him by A. Grouvelle', revised his opinion on the species and transferred it into *Mechanicus* Schaufuss, 1887; he also suggested that the specimen from Sumatra could be indeed 'the untraceable type of *Euplectops denticollis* Schaufuss, of which it fits rather well the description'. It appears thus that Raffray was aware of some kind of draft or notes by Schaufuss, but the latter definitely never published a description of an '*Euplectus cordicollis*' or of an '*Euplectops denticollis*', nor of an '*E. angusticollis*' (see below). We received from MNHN eight specimens identified as *Mechanicus pubescens* in Raffray's collection; these consist of 5 males and 3 females, all from Sumatra, one of the females bearing an additional label "*Euplectus angusticollis* Schfs". Moreover, five of them (4 males and 1 female) are conspecific with *P. tenasserimi*, one pair (including the female '*E. angusticollis*') belongs to a distinct *Pareuplectops* species, and we could not reliably identify the remaining female to species. This situation results almost certainly from the unfortunate curatorial work performed on Raffray's collection by Jeannel and his technicians. In the interest of stability of nomenclature, we designate as lectotype of *P. pubescens* the single male which is not conspecific with *P. tenasserimi*, while the remaining specimens are removed from the type series.

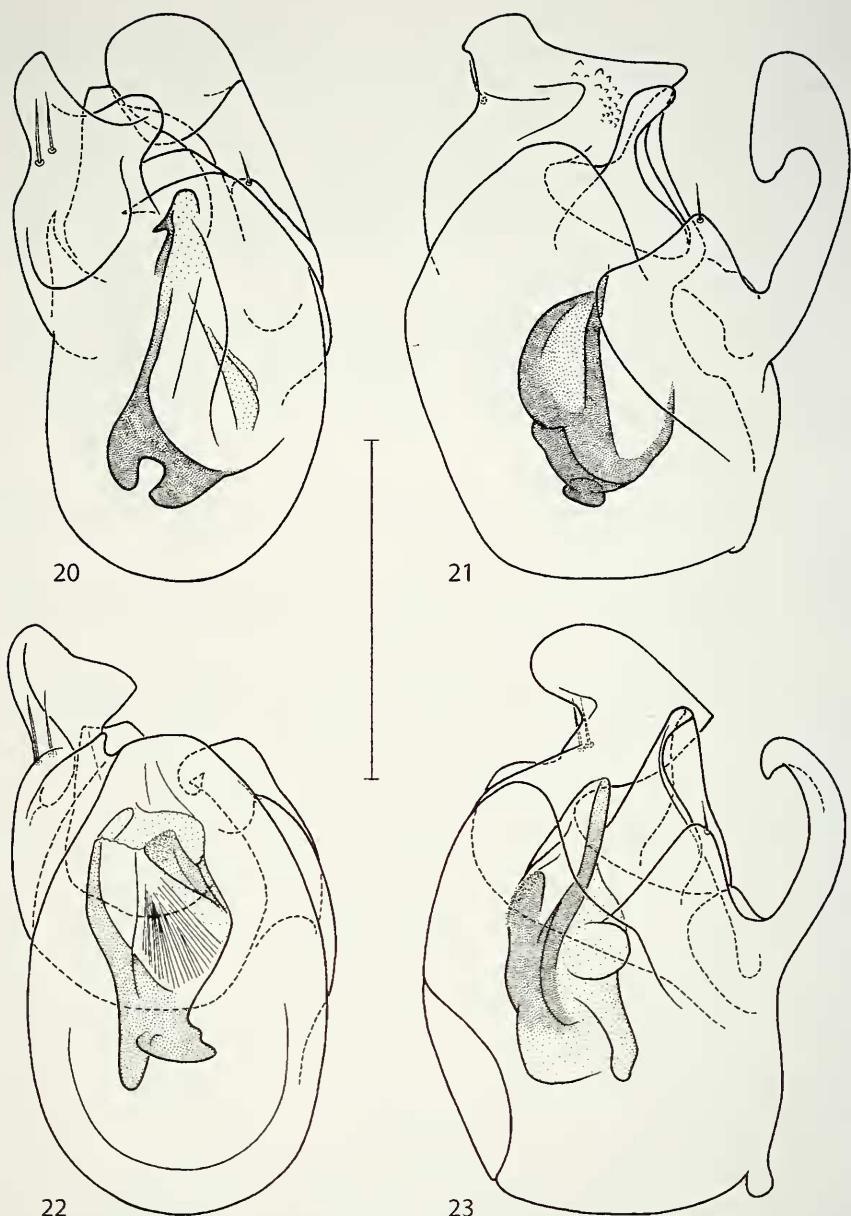
Within *Pareuplectops*, only *P. lucanicus* and *P. pubescens* possess the pronotum entirely impunctate. *Pareuplectops pubescens* is easily distinguished from *P. lucanicus* by its larger body size, and by the presence of a stout spine on the male protrochanter.

Pareuplectops salami sp. n.

Figs 3, 5, 22-23

Holotype (male, in MHNG): [CHINA] Hong Kong, Tai Po, 8.vi.1996 (G. de Rougemont) flight interception trap.

Paratypes (2, in MHNG): same data as holotype, but New Territories, ix-x.1996, 1 male & 1 female.



FIGS 20-23

Pareuplectops pubescens (Raffray) (20-21) and *P. salami* n. sp. (22-23); aedeagus in dorsal (20, 22) and lateral (21, 23) views. Scale bar = 0.1 mm.

DESCRIPTION: Body 1.15-1.20 mm long, reddish brown or yellowish brown, with pubescence at least 0.03 mm long. Head with lateral and posterior edges not well-marked, not darkened, gradually inclined; posterior edge fairly straight near lateral

angles, the latter not well-marked, rounded; lateral edges fairly straight; upper part of head (except smooth vertexal depression) densely covered laterally and posteriorly with big punctuation (interval between punctures smaller than their diameter); posterior half of frons just in front of vertexal depression covered with finer punctuation; anterior half of frons impunctate. Interval between tentorial foveae about as large as that between each fovea and corresponding lateral edge of head. Pronotal disc densely covered with large punctuation (interval between punctures much smaller than their diameter), in middle with about 6-7 punctures between median sulcus and each lateral sulcus; area posteriorly transversal sulcus punctated as disc (except area posterior to antebasal sulcus impunctate); punctuation near anterior edge as dense as that on disc, but finer. Elytra impunctate; discal sulcus extending to half of elytral length. Metasternum impunctate. Abdomen with tergites and sternites impunctate; tergite 1 (Fig. 5) with basal carinae straight, or somewhat arcuate, somewhat diverging near posterior margin; maximal interval between carinae nearly one third of the width of segment 1.

MEASUREMENTS: HL = 0.17-0.18 mm; HW = 0.17-0.18 mm; HW_{max} = 0.27-0.30 mm; PL = 0.24-0.25 mm; PW = 0.33-0.34 mm; EL = 0.39-0.40 mm; EW = 0.49-0.50 mm.

Male. Protrochanter with stout, curved spine. Protibia simple. Aedeagus (Figs 22-23) 0.15 mm long.

DISTRIBUTION: China: Hong Kong.

COMMENTS: *Pareuplectops salami* differs from the other species that have the posterior edges of head gradually inclined (see comment of *P. lopchang*) by the presence of a stout spine on the male protrochanter in combination with completely impunctate elytra.

***Pareuplectops sommoo* sp. n.**

Figs 24-25

Holotype (male, in PCSK): LAOS, 100 km North Vientiang, Vang Vieng, 300 m, 20.x.2003 (S. Kurbatov) [sifting] rotten wood.

DESCRIPTION: Body 1.25 mm long, reddish brown, with pubescence about 0.03 mm long. Head with posterior and lateral edges blackish, posterior edge abruptly inclined, lateral edges inclined less abruptly; posterior edge near lateral angles not sinuate, the latter well-marked, angulated; lateral edges straight on their posterior portion; upper part of head impunctate. Interval between tentorial foveae slightly larger than that between each fovea and corresponding lateral edge of head. Pronotal disc (except area posterior to antebasal sulcus impunctate) densely covered with fine punctuation (interval between punctures nearly as large as their diameter); in middle of pronotum with 9-11 punctures between median sulcus and each lateral sulcus; punctuation sparser and finer near anterior and lateral edges. Elytra with punctuation similar to that on pronotum, but sparser; discal sulcus extending to about half of elytral length. Metasternum impunctate. Abdomen with tergal punctuation similar to that on elytra, consisting of punctures bigger on tergites 3-4 than on tergites 1-2, where they are minute; tergite 1 with basal carinae fairly straight, parallel; maximal interval between carinae about one third of the width of segment 1; sternites shallowly punctate.

MEASUREMENTS: HL = 0.17 mm; HW = 0.19 mm; HWmax = 0.30 mm; PL = 0.27 mm; PW = 0.36 mm; EL = 0.41 mm; EW = 0.40 mm.

Male. Protrochanter with small denticle. Protibia with mesoapical tooth. Aedeagus (Figs 24-25) 0.16 mm long.

DISTRIBUTION: Laos.

COMMENTS: See comments under *P. fartner*.

***Pareuplectops tenasserimi* (Blattný, 1925) comb. n.**

Figs 26-27

Epiplectus tenasserimi Blattný, 1925: 189.

Epiplectus novissimus Blattný, 1925: 190 (syn. n.).

TYPE MATERIAL (2 males, in NHMP): holotype of *Epiplectus tenasserimi* Blattný labeled “Mus. Pragense / Tenasserim / Coll. Helfer [white label] | Typus [red label] | *E. tenasserimi* / Blattný det. [white label] | Mus. Nat. Prague / Inv. 18 845 [orange label]”; holotype of *Epiplectus novissimus* Blattný labeled “Mus. Pragense / Tenasserim / Coll. Helfer [white label] | Typus [red label] | *E. novissimus* / Blattný det. [white label] | Mus. Nat. Pragae / Inv. 18 846 [orange label]”.

ADDITIONAL MATERIAL (7): INDONESIA. Sumatra, Sumatra Selatan, Palembang [labeled “Sumatra / Palembang | Museum Paris / 1917 / coll. A. Raffray | *M. pubescens* A. Raffray det.”] 4 males & 1 female in MNHN & MHNG; NORTH VIETNAM. 180 km SSW Hanoi, 40 km SW Thang Hoa, Ben En Nat. Park, 50 m, 27.viii.1997 (A. Napolov) UV-light, 1 male in PCSK; THAILAND, Kampangsaen Natl. Biocontrol Res. Cent., 5.xi.1995 (W. Suasa-ard) UV-trap, 1 male in PCSK.

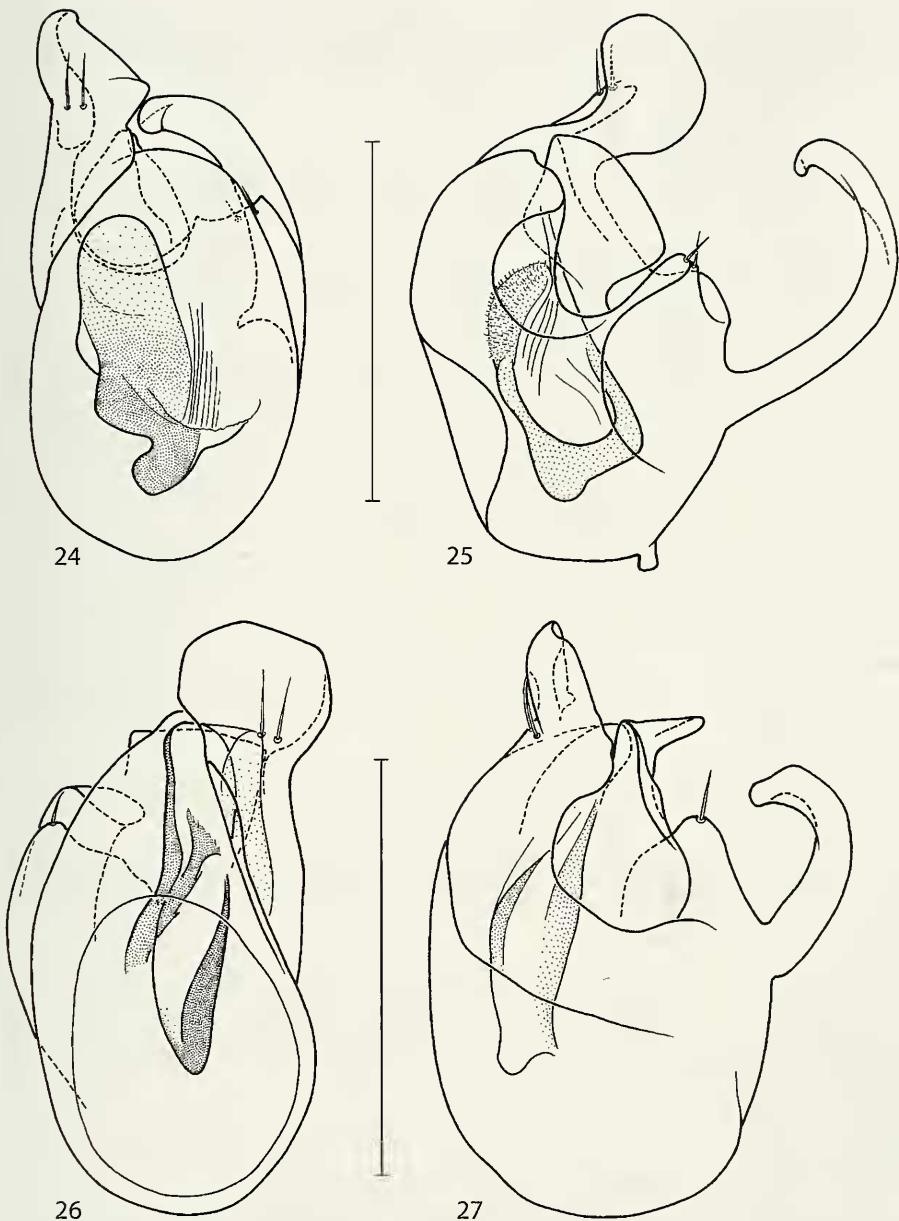
DESCRIPTION: Body 1.30 mm long, reddish brown, with pubescence about 0.01 mm long. Head with posterior and lateral edges abruptly inclined, mostly blackish; posterior edge near lateral angles not sinuate, the latter well-marked, angulate; lateral edges straight; upper part of head impunctate. Interval between tentorial foveae about as large as that between each fovea and corresponding lateral edge of head. Pronotal disc (except area posterior to antebasal sulcus impunctate) sparsely covered with fine punctuation (interval between punctures nearly as wide as their diameter); middle of pronotum with 8-10 punctures between median sulcus and each lateral sulcus; punctuation sparser and finer near anterior and lateral edges. Elytra with punctuation similar to that on pronotum, but finer (interval between punctures exceeding their diameter); discal sulcus extending to about half of elytral length. Metasternum impunctate. Abdomen with tergal punctuation uniform, similar to that on elytra; tergite 1 with basal carinae arcuate on their anterior portion, diverging near posterior margin; maximal interval between carinae about one quarter of the width of segment 1; sternites impunctate.

MEASUREMENTS: HL = 0.20 mm; HW = 0.16 mm; HWmax = 0.25 mm; PL = 0.22 mm; PW = 0.30 mm; EL = 0.34 mm; EW = 0.36 mm.

Male. Protrochanter simple. Protibia with mesoapical tooth. Aedeagus (Figs 26-27) 0.14 mm long.

DISTRIBUTION: The species is widely distributed in Southeast Asia, where it has been collected in Indonesia, Myanmar, Thailand and Vietnam.

COMMENTS: According to Blattný (1925) the description of *Epiplectus novissimus* was based on a single male, and that of *E. tenasserimi* on a single female, both



FIGS 24-27

Pareuplectops sommoo n. sp. (24-25) and *P. tenasserimi* (Blattný) (26-27); aedeagus in dorsal (24, 26) and lateral (25, 27) views. Scale bars = 0.1 mm.

from Tenasserim (Myanmar). The study of these holotypes revealed that both are conspecific males, and that they belong to *Pareuplectops*. Unfortunately, the dissected holotype of *E. novissimus* disappeared from its mounting card during return from

Moscow to Prague, and all what is left of it is the microscopic preparation containing its aedeagus, tergite 5, sternite 6, and the genital plate (sternite 7). See comments under *P. coomani* and *P. fartner*.

***Pareuplectops tubarius* sp. n.**

Figs 28-29

Holotype (male, in PCSK): THAILAND, Suratthani Prov., Khao Sok Nat. Res., xi.1995 (M. Mostovski).

DESCRIPTION: Body 1.40 mm long, brown, with pubescence about 0.02 mm long. Head with lateral and posterior edges well-marked, blackish, abruptly inclined; posterior edge not sinuate near lateral angles, the latter well-marked, angulate; lateral edges straight; upper part of head (except smooth frons and vertexal depression) covered with punctuation similar to that on pronotum, but finer. Interval between tentorial foveae slightly larger than that between each fovea and corresponding lateral edge of head. Pronotal disc (except area posterior to the antebasal sulcus impunctate) densely covered with fine punctuation (interval between punctures smaller than their diameter), the latter sparser and finer on area posterior to transverse sulcus; in middle of pronotum with about 8-9 punctures between median sulcus and each lateral sulcus; punctuation sparser and finer near anterior and lateral edges. Elytral punctuation rather dense, consisting of punctures distinctly smaller than those on pronotum; discal sulcus extending to half of elytral length. Metasternum impunctate. Abdomen with tergal punctuation similar to that on elytra, consisting of slightly bigger punctures on tergites 3-4 than on tergites 1-2; tergite 1 with basal carinae fairly straight, somewhat diverging near posterior margin; maximal interval between carinae distinctly less than one-third width of segment 1; sternites punctate.

MEASUREMENTS: HL = 0.21 mm; HW = 0.20 mm; HWmax = 0.32 mm; PL = 0.30 mm; PW = 0.38 mm; EL = 0.44 mm; EW = 0.42 mm.

Male. Protrochanter simple. Protibia with mesoapical tooth (on holotype rather large on right tibia, and very small on left tibia!). Aedeagus (Figs 28-29) 0.21 mm long.

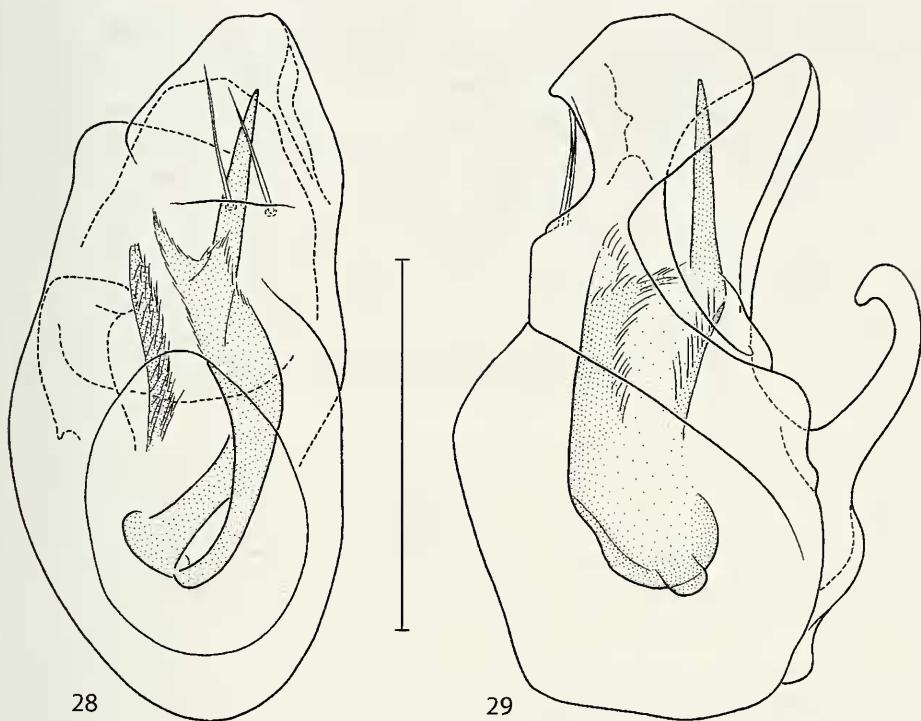
DISTRIBUTION: Thailand.

COMMENTS: *Pareuplectops tubarius* differs from all the other species that have the posterior margins of the head gradually inclined (see comment of *P. lopchang*) and long elytral pubescence (see comment of *P. coomani*) by the protrochanter, which is unmodified in the male.

***Euparops* gen. n.**

TYPE SPECIES: *Pareuplectops styx* Chandler; gender: masculine.

DESCRIPTION: Body 1.00-1.40 mm long, elongate and strongly convex, fairly subcylindrical; more or less shiny due to punctuation being generally shallow or almost absent. Colouration fairly uniform, from pale brown to dark brown. Pubescence short, recumbent, that on medioapical portion of elytra parallel. Head in dorsal view trapeziform or triangular, with anterior edge rounded. Upper part flat, except median area distinctly depressed, vertexal depression extending posteriorly to large tentorial foveae. Lateral edges of frons with narrow and deep postantennal notches, the latter



FIGS 28-29

Pareuplectops tubarius n. sp.; aedeagus in dorsal (28) and lateral (29) views. Scale bar = 0.1 mm.

extending to anterior angles of vertexal depression and forming an additional pair of foveae (these notches are cuticular invaginations of the lateral frontal edges). Posterior edge of head with small triangular occipital depression. Antennal tubercles indistinct. Eyes moderately developed. Temples present at least in female (absent only in the male of *E. forix*). Article 4 of maxillary palpi with group of sensillae ('trichomes' sensu Nomura, 1991) on external side. Genal areas each with marked and smooth depression allowing repose of the maxillary palpi. Antenna consisting of 11 articles, distinctly divided into big scapus and pedicel, small and close articles of funicule, and more (male) or less (female) conspicuous club composed of 3 articles; scape notched apically, revealing basal stalk of article 2. Pronotum with median antebasal fovea and pair of lateral antebasal foveae; median antebasal fovea joined to lateral antebasal foveae by occasionally interrupted transverse sulci; median sulcus absent; lateral antebasal foveae prolonged anteriorly by lateral sulci up to ventral area below anterior pronotal margin; lateral pronotal outline near lateral fovea with distinct tooth; basal edge with row of four shallow depressions. Prosternum with pairs of lateral procoxal and anteroprosternal foveae; paranotal carinae present; median carina present, distinctly angular in lateral view. Elytra (Fig. 30) with 4 basal foveae grouped by pairs in two basal depressions; subhumeral fovea prolonged with marginal carina extending along

entire elytral length; posterior margin with row of small and well-marked smooth depressions. Mesosternum (Fig. 31) with pair of lateral foveae; median carina absent. Mesocoxal cavities separated. Metasternum (Fig. 31) with pairs of lateral and lateral mesocoxal foveae; pair of longitudinal carinae present, extending from posterior edge of mesocoxal cavities to posterior metasternal margin. First three visible abdominal tergites fused to corresponding sternites; paratergal-tergal suture distinct only on tergite 1 (Fig. 33), almost indistinct and very short on tergites 2-3; junction between tergites 1-3 (IV-VI) and sternites 2-4 (IV-VI) carinate; tergite 1 about as long as tergites 2 or 3, with pair of long longitudinal basal carinae (their length is subject to infra-specific variation), area between these carinae not depressed and supports single mediobasal fovea; tergites 2-3 each with pair of basal longitudinal carinae; sternite 2 with pair of basolateral foveae; posterior edge of abdominal sternite 6 notched; sternite 7 modified as genital plate covering genital opening (its structure slightly different between male and female).

Male secondary sexual characters affecting the size of antennal article 9 (i.e. its size fairly intermediate between that of articles 8 and 10 in female, and about as big as article 10 and much bigger than article 8 in male), and occasionally also protrochanters, protibiae and mesotibiae. Aedeagus with rather membranous median lobe and two asymmetrical parameres; asymmetry of parameres occasionally inverted with respect to axis of symmetry of median lobe (i.e. occurrence of 'left' and 'right' forms).

DISTRIBUTION AND NATURAL HISTORY: *Euparops* is known from only 14 specimens collected in forests using pan traps, flight intercept traps, or from sifted samples of leaf litter. The 4 species of *Euparops* are all restricted to Australia (2 species in Queensland and 2 species in New South Wales), where they have apparently very limited geographic distributions.

COMMENTS: *Euparops* differs from *Pareuplectops* mainly by the abdominal tergite 1 supporting a single mediobasal fovea, the presence on the posterior elytral margin of a row of 5-6 well-marked smooth depressions, and the lack of a medial pronotal sulcus.

ETYMOLOGY: The name *Euparops* is an arbitrary combination of letters.

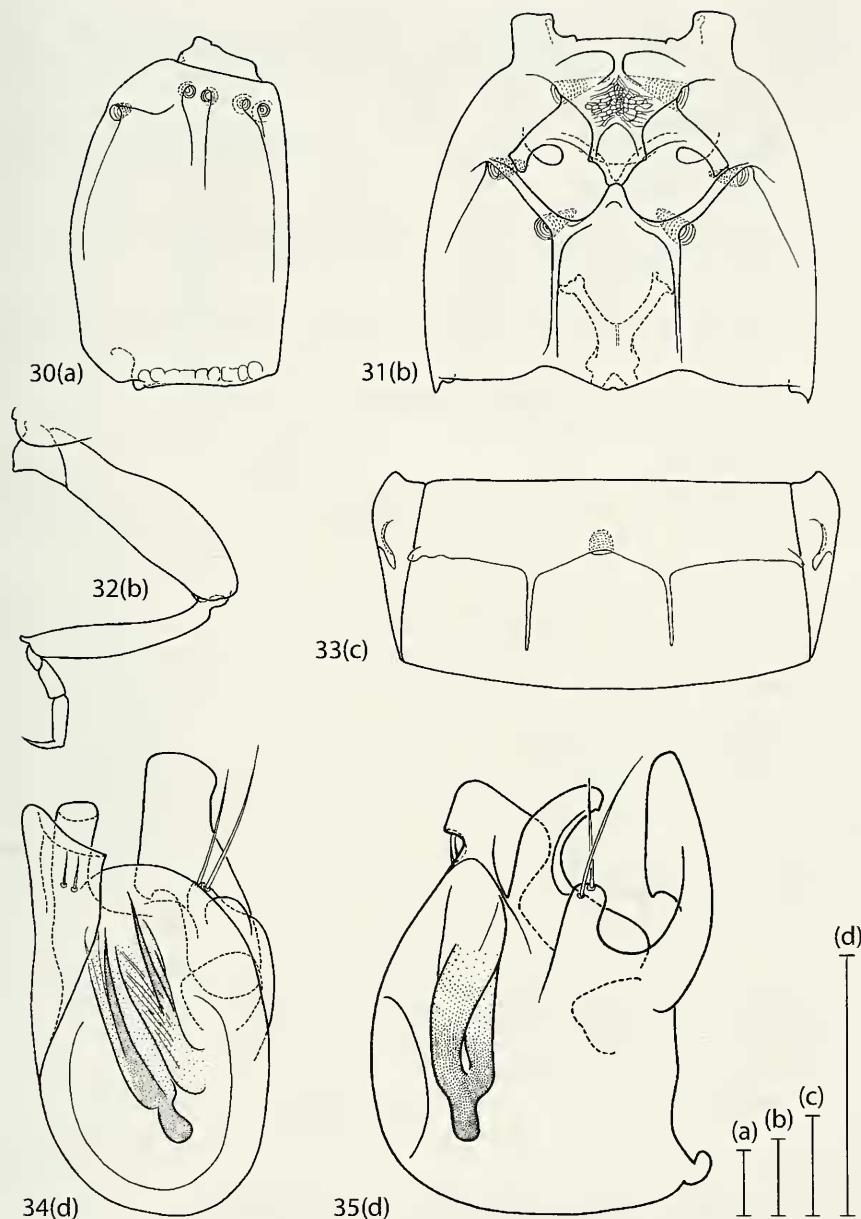
***Euparops chandleri* sp. n.**

Figs 36-37

Holotype (male, in ANIC): AUSTRALIA, Queensland, 35 km North of Mission Beach, 2.viii.1993 (D. S. Chandler) sift litter in cut tropical rainforest.

Paratypes (2, in MHNG & PCDC): same data as holotype, but sifting rotten wood in tropical rainforest, 1 female; same data, but 30.vii.1993, sift forest litter in cut tropical rainforest, 1 male.

DESCRIPTION: Body 1.10 mm long, yellowish brown, with pubescence about 0.03 mm long. Head with lateral and posterior edges gradually inclined; posterior edge with lateral angles not well-marked, rounded; upper part of head impunctate. Interval between tentorial foveae about as large as that between each fovea and corresponding lateral edge of head. Eyes in lateral view 2 times (female) or 3 times (male) as wide as temples. Pronotal disc covered with fine punctuation (interval between punctures much larger than their diameter). Elytral punctuation similar to that on pronotum, but finer;



FIGS 30-35

Euparops styx (Chandler); left elytron (30); abdominal tergite 1 with paratergites (33); mesosternum and metasternum (31); dorsal view of male right anterior leg (32); aedeagus in dorsal (34) and lateral (35) views. Scale bars = 0.1 mm.

discal sulcus extending to nearly one third of elytral length. Abdomen with tergal punctuation similar to elytral, or slightly denser; tergite 1 with basal carinae parallel; maximal interval between carinae slightly less than one third of the width of segment 1.

MEASUREMENTS: HL = 0.15-0.16 mm; HW = 0.18 mm; HWmax = 0.24-0.26 mm; PL = 0.19-0.21 mm; PW = 0.26-0.29 mm; EL = 0.27-0.29 mm; EW = 0.33-0.36 mm.

Male. Protrochanter simple. Protibia and mesotibia each with mesoapical tooth, that on mesotibia minute. Aedeagus (Figs 36-37) 0.19-0.20 mm long.

DISTRIBUTION: Australia: Queensland.

COMMENTS: The species is named in honour of its collector Donald S. Chandler, Durham.

This species is the only *Euparops* with finely punctate elytra.

***Euparops djeridu* sp. n.**

Figs 38-39

Holotype (male, in ANIC): AUSTRALIA, New South Wales, 2 km West entrance New England N. P., 1340 m, 20.v.1993 (D. S. Chandler) sift rotten log in wet sclerophyll forest.

Paratypes (4, in MHNG & PCDC): same data as holotype, 2 males & 2 females.

DESCRIPTION: Body 1.15 mm long, reddish brown or yellowish brown, with pubescence about 0.03-0.04 mm long. Head with lateral and posterior edges gradually inclined; posterior edge with lateral angles not well-marked, rounded; upper part of head impunctate. Interval between tentorial foveae larger than that between each fovea and corresponding lateral edge of head. Eyes in lateral view nearly 2 times as wide as temples. Pronotal disc impunctate, or scarcely covered with very fine punctuation. Elytral punctuation similar to that on pronotum; discal sulcus extending to half of elytral length, or nearly. Abdominal tergites impunctate; tergite 1 with basal carinae parallel; maximal interval between carinae slightly less than one third of the width of segment 1.

MEASUREMENTS: HL = 0.18-0.19 mm; HW = 0.21-0.22 mm; HWmax = 0.26-0.27 mm; PL = 0.27 mm; PW = 0.33-0.36 mm; EL = 0.31-0.34 mm; EW = 0.39-0.45 mm.

Male. Protrochanter with small denticle. Protibia and mesotibia each with long, curved mesoapical tooth. Aedeagus (Figs 38-39) 0.18-0.21 mm long.

DISTRIBUTION: Australia: Queensland.

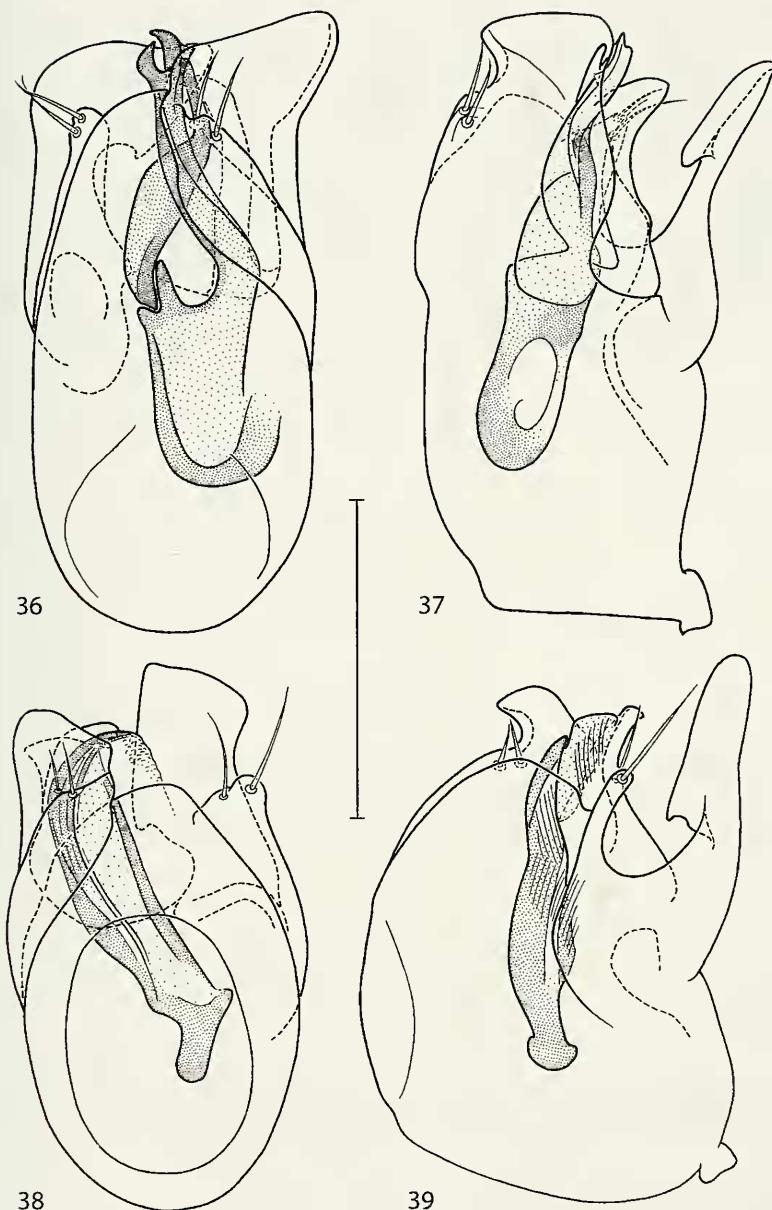
COMMENTS: The species is the only *Euparops* with a smooth pronotum.

***Euparops forix* sp. n.**

Figs 40-41

Holotype (male, in ANIC): AUSTRALIA, Queensland, 11 km East North East of Mt. Tozer <12°43'S; 143°18'E> 11-16.vii.1986 (J. C. Cardale) ex. pantraps.

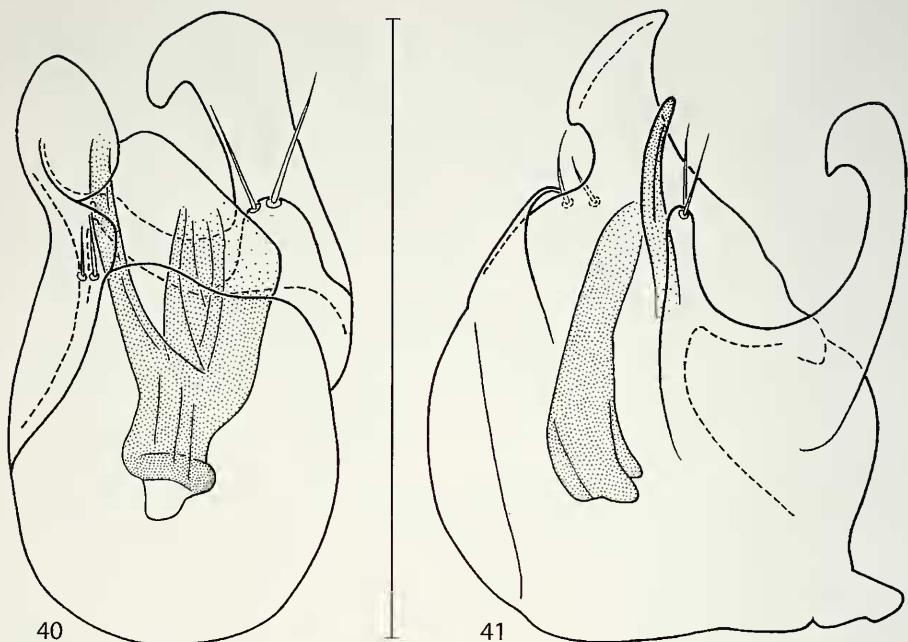
DESCRIPTION: Body 1.00 mm long, yellowish brown, with pubescence about 0.03 mm long. Head with lateral and posterior edges more or less abruptly inclined; posterior edge with lateral angles not well-marked, rather rounded; sides of head and posterior area near temples densely covered with big punctures, other areas impunctate. Interval between tentorial foveae smaller than that between each fovea and corresponding lateral edge of head. Eyes big; temples in lateral view as wide as one



FIGS 36-39

Euparops chandleri n. sp. (36-37) and *E. dijeridi* n. sp. (38-39); aedeagus in dorsal (36, 38) and lateral (37, 39) views. Scale bar = 0.1 mm.

eye facet. Pronotal disc densely covered with punctures bigger than those on head (interval between punctures several times smaller than their diameter); interruption of transverse sulcus unusually large, punctate; lateral pronotal outline near lateral fovea



FIGS 40-41

Euparops forix n. sp.; aedeagus in dorsal (40) and lateral (41) views. Scale bar = 0.1 mm.

with tooth unusually small. Elytra fairly impunctate; discal sulcus extending to almost half of elytral length. Abdomen with tergal punctuation similar to that on elytra; tergite 1 with basal carinae parallel; maximal interval between carinae about one-quarter of the width of segment 1.

MEASUREMENTS: HL = 0.15 mm; HW = 0.17 mm; HWmax = 0.25 mm; PL = 0.23 mm; PW = 0.27 mm; EL = 0.33 mm; EW = 0.36 mm.

Male. Protrochanter, protibia and mesotibia simple. Aedeagus (Figs 40-41) 0.10 mm long.

DISTRIBUTION: Australia: Queensland.

COMMENTS: This species is easily distinguished from its congeners by its big eyes, conspicuous pronotal punctation, unusually wide interruption of the pronotal transverse sulcus, and absence of sexual dimorphism on legs.

***Euparops styx* (Chandler, 2001) comb. n.**

Figs 30-35

Pareuplectops styx Chandler, 2001: 391.

Holotype (male, in ANIC, not examined): AUSTRALIA, New South Wales, Styx River State Forest, Cedar Pit Floral reserve, 40 km SE Wollomombi, 990 m, 20.ii-16.iii.1993 (D. S. Chandler) E-W flight intercept trap, old wet sclerophyll.

Paratypes examined (3, in PCDC): same data as holotype, but 29 km SE Wollomombi, 960 m, 6.xi-1.xi.1993 (K. MacGregor) flight intercept trap, cut rainforest, 1 male; New South Wales, 2 km W entrance New England National Park, 1340 m, 17.v.1993 (D. S. Chandler) sift forest litter, cut wet sclerophyll, 1 female; same data, but 20.v.1993, sift rotten log, 1 male.

Additional material (1 male, in MHNG): same data as holotype, but 15.xii.1993-2.i.1994.

DESCRIPTION: Body 1.30-1.45 mm long, reddish brown, with pubescence 0.03-0.04 mm long. Head with lateral and posterior edges not well-marked, not darkened, gradually inclined; posterior edge with lateral angles not well-marked, rounded; upper part of head impunctate. Interval between tentorial foveae less than 2 times as large as that between each fovea and corresponding lateral edge of head. Eyes in lateral view about 2 times as wide as temples. Pronotal disc covered with minute punctures. Elytral punctuation similar to that on pronotum, but finer, almost evanescent; discal sulcus extending to less than half of elytral length (Fig. 30). Abdomen with tergal punctuation evanescent; tergite 1 (Fig. 33) with basal carinae parallel, maximal interval between carinae less than one-third width of segment 1.

MEASUREMENTS: HL = 0.21-0.24 mm; HW = 0.23-0.25 mm; HWmax = 0.31-0.32 mm; PL = 0.31-0.34 mm; PW = 0.42-0.45 mm; EL = 0.44-0.50 mm; EW = 0.52-0.60 mm.

Male. Protrochanter (Fig. 32) with stout, curved spine. Protibia (Fig. 32) and mesotibia each with mesoapical tooth. Aedeagus (Figs 34-35) 0.16 mm long.

DISTRIBUTION: Australia: New South Wales.

COMMENTS: *Euparops styx* is the only member of the genus exceeding 1.2 mm in body length.

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